SEQUENCE LISTING

<110> Bayer Pharmaceuticals Corporation
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WANG, Wei

<120> PITUITARY ADENYLATE CYCLASE ACTIVATING PEPTIDE (PACAP) RECEPTOR 3 (VPAC2) AGONISTS AND THEIR PHARMACOLOGICAL METHODS OF USE

<130> MSB-7295

<150> US 60/395,738
<151> 2002-07-12

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<170> PatentIn version 3.2

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His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Arg Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg
20 25 30

<210> 91
<211> 30
<212> PRT
<213> Homo sapiens

<400> 91

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Arg
20 25 30

<210> 92
<211> 30
<212> PRT
<213> Homo sapiens

<400> 92

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Asn Lys Arg
20 25 30

<210> 93
<211> 30
<212> PRT
<213> Homo sapiens

<400> 93

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Gln Asn Lys Arg
20 25 30

<210> 94
<211> 30
<212> PRT
<213> Homo sapiens

<400> 94

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Arg Asn Lys Arg
20 25 30

<210> 95
<211> 30
<212> PRT
<213> Homo sapiens

<400> 95

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Arg Arg
20 25 30

<210> 96
<211> 30
<212> PRT
<213> Homo sapiens

<400> 96

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Ala
20 25 30

<210> 97
<211> 30
<212> PRT
<213> Homo sapiens

<400> 97

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Phe
20 25 30

<210> 98
<211> 30
<212> PRT
<213> Homo sapiens

<400> 98

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys His
20 25 30

<210> 99
<211> 30
<212> PRT
<213> Homo sapiens

<400> 99

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His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1               5                   10                  15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Ile
            20                  25                  30


<210>  100
<211>  30
<212>  PRT
<213>  Homo sapiens

<400>  100

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1               5                   10                  15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Lys
            20                  25                  30


<210>  101
<211>  30
<212>  PRT
<213>  Homo sapiens

<400>  101

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1               5                   10                  15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Leu
            20                  25                  30


<210>  102
<211>  30
<212>  PRT
<213>  Homo sapiens

<400>  102

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1               5                   10                  15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Met
            20                  25                  30


<210>  103
<211>  30
<212>  PRT
<213>  Homo sapiens

<400>  103

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1               5                   10                  15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Pro
            20                  25                  30


<210>  104
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<211> 30
<212> PRT
<213> Homo sapiens

<400> 104

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Gln
20 25 30

<210> 105
<211> 30
<212> PRT
<213> Homo sapiens

<400> 105

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Ser
20 25 30

<210> 106
<211> 30
<212> PRT
<213> Homo sapiens

<400> 106

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Thr
20 25 30

<210> 107
<211> 30
<212> PRT
<213> Homo sapiens

<400> 107

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Val
20 25 30

<210> 108
<211> 30
<212> PRT
<213> Homo sapiens

<400> 108

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Trp
20 25 30

<210> 109
<211> 30
<212> PRT
<213> Homo sapiens

<400> 109

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Asn Lys Tyr
20 25 30

<210> 110
<211> 30
<212> PRT
<213> Homo sapiens

<400> 110

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Asn Arg Ile
20 25 30

<210> 111
<211> 30
<212> PRT
<213> Homo sapiens

<400> 111

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Asn Arg Ile
20 25 30

<210> 112
<211> 30
<212> PRT
<213> Homo sapiens

<400> 112

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Asn Arg Ile
20 25 30

<210> 113
<211> 30
<212> PRT
<213> Homo sapiens

<400> 113

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Asn Arg Ile
20 25 30

<210> 114
<211> 30
<212> PRT
<213> Homo sapiens

<400> 114

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Arg Asn Arg Ile
20 25 30

<210> 115
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> PEG is polyethylene glycol

<400> 115

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys-PEG
20 25 30

<210> 116
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> Ac is acetyl; PEG is polyethylene glycol

<400> 116

Ac-His Thr Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys-PEG
20 25 30

<210> 117

<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> PEG is polyethylene glycol

<400> 117

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys-PEG
20 25 30

<210> 118
<211> 30
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(30)
<223> PEG is polyethylene glycol

<400> 118

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Cys-PEG
20 25 30

<210> 119
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
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<223> PEG is polyethylene glycol

<400> 119

His Thr Glu Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Val Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys-PEG
20 25 30

<210> 120
<211> 32
<212> PRT
<213> Homo sapiens

<220>

<221> MISC_FEATURE
<222> (1)..(32)
<223> PEG is polyethylene glycol

<400> 120

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Leu Ala Val Lys Lys Tyr Leu Gln Asp Ile Lys Gln Gly Gly Thr Cys-PEG
20 25 30

<210> 121
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 121

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys-PEG
20 25 30

<210> 122
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> PEG is polyethylene glycol

<400> 122

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Leu Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Gln Lys Arg Tyr Cys-PEG
20 25 30

<210> 123
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
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<223> PEG is polyethylene glycol

<400> 123

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Thr Ile Lys Gln Lys Arg Tyr Cys-PEG
20 25 30

<210> 124
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(32)
<223> PEG is polyethylene glycol

<400> 124

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala His Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys-PEG
20 25 30

<210> 125
<211> 32
<212> PRT
<213> Homo sapiens

<220>
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<223> PEG is polyethylene glycol

<400> 125

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys His Tyr Leu Gln Ser Ile Lys Gln Lys Arg Tyr Cys-PEG
20 25 30

<210> 126
<211> 31
<212> PRT
<213> Homo sapiens

<220>
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<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 126

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys-PEG
20 25 30

<210> 127
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 127

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys-PEG
20 25 30

<210> 128
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
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<223> PEG is polyethylene glycol

<400> 128

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Arg Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys-PEG
20 25 30

<210> 129
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<213> Homo sapiens

<220>
<221> MISC_FEATURE
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<223> PEG is polyethylene glycol

<400> 129

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Arg Cys-PEG
20 25 30

<210> 130
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<212> PRT
<213> Homo sapiens

<220>
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<223> PEG is polyethylene glycol

<400> 130

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Gln Lys Arg Cys-PEG
20 25 30

<210> 131
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 131

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Gln Gln Lys Arg Cys-PEG
20 25 30

<210> 132
<211> 31
<212> PRT
<213> Homo sapiens

<220>
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<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 132

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Arg Gln Lys Arg Cys-PEG
20 25 30

<210> 133
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 133

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Arg Cys-PEG
20 25 30

<210> 134
<211> 31
<212> PRT
<213> Homo sapiens

<220>
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<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 134

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ala Cys-PEG
20 25 30

<210> 135
<211> 31
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<213> Homo sapiens

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<400> 135

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Phe Cys-PEG
20 25 30

<210> 136
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<400> 136

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1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys His Cys-PEG
20 25 30

<210> 137
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<400> 137

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ile Cys-PEG
20 25 30

<210> 138
<211> 31
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<400> 138

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1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Lys Cys-PEG
20 25 30

<210> 139
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<400> 139

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1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Leu Cys-PEG
20 25 30

<210> 140

<211> 31
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<213> Homo sapiens

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<223> PEG is polyethylene glycol

<400> 140

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1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Met Cys-PEG
20 25 30

<210> 141
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<212> PRT
<213> Homo sapiens

<220>
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<222> (1)..(31)
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<400> 141

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Pro Cys-PEG
20 25 30

<210> 142
<211> 31
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<213> Homo sapiens

<220>
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<223> PEG is polyethylene glycol

<400> 142

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Gln Cys-PEG
20 25 30

<210> 143
<211> 31
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<213> Homo sapiens

<220>

<221> MISC_FEATURE
<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 143

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Ser Cys-PEG
20 25 30

<210> 144
<211> 31
<212> PRT
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<400> 144

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Thr Cys-PEG
20 25 30

<210> 145
<211> 31
<212> PRT
<213> Homo sapiens

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<222> (1)..(31)
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<400> 145

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1 5 10 15

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20 25 30

<210> 146
<211> 31
<212> PRT
<213> Homo sapiens

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<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 146

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1               5                   10                  15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Trp Cys-PEG
            20                  25                  30
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<210> 147
<211> 31
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<213> Homo sapiens

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<400> 147

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1               5                   10                  15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Lys Gln Lys Tyr Cys-PEG
            20                  25                  30
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<210> 148
<211> 31
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<213> Homo sapiens

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<223> PEG is polyethylene glycol

<400> 148

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1               5                   10                  15

Met Ala Gly Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile Cys-PEG
            20                  25                  30
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<210> 149
<211> 31
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<213> Homo sapiens

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<223> PEG is polyethylene glycol

<400> 149

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1               5                   10                  15

Met Ala Lys Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile Cys-PEG
            20                  25                  30
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<210> 150
<211> 31
<212> PRT
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<222> (1)..(31)
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<400> 150

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1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Lys Gln Arg Ile Cys-PEG
20 25 30

<210> 151
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 151

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ala Lys Lys Tyr Leu Gln Ser Ile Pro Gln Arg Ile Cys-PEG
20 25 30

<210> 152
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (1)..(31)
<223> PEG is polyethylene glycol

<400> 152

His Ser Asp Ala Val Phe Thr Asp Gln Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Ser Lys Lys Tyr Leu Gln Ser Ile Arg Gln Arg Ile Cys-PEG
20 25 30

<210> 153
<211> 123
<212> DNA
<213> Homo sapiens

<400> 153
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aaacaggttg ctgcaaagaa atacctgcag tccatcaagc agaagcgtta ctaatgactc 120

gag 123

<210> 154
<211> 93
<212> DNA
<213> Homo sapiens

<400> 154
cactccgacg ctgttttcac cgaccagtac acgcgtctgc gtaaacaggt tgctgcaaag 60

aaatacctgc agtccatcaa gcagaagcgt tac 93

<210> 155
<211> 93
<212> DNA
<213> Homo sapiens

<400> 155
cactccgacg ctgttttcac cgaccagtac acgcgtctgc gtaaacagat ggctgcaaag 60

aaatacctgc agtccatcaa gcagaagcgt tac 93

<210> 156
<211> 87
<212> DNA
<213> Homo sapiens

<400> 156
cactccgacg ctgttttcac cgaccagtac acgcgtctgc gtaaacaggt tgctgcaaag 60

aaatacctgc agtccatcaa gcagaag 87

<210> 157
<211> 93
<212> DNA
<213> Homo sapiens

<400> 157
cacaccgaag ctgttttcac cgaccagtac acgcgtctgc gtaaacaggt tgctgcaaag 60

aaatacctgc agtccatcaa gcagaagcgt tac 93

<210> 158
<211> 93
<212> DNA
<213> Homo sapiens

<400> 158
cactccgacg ctgttttcac cgaccagtac acgcgtctgc gtaaacagct ggctgttaag 60

aaatacctgc aggacatcaa gcagggcggt acc 93

<210> 159
<211> 90
<212> DNA
<213> Homo sapiens

<400> 159
cactccgacg ctgttttcac cgaccagtac acgcgtctgc gtaaacagat ggctgcaaag 60

aaatacctgc agtccatcaa gcagaagcgt 90

<210> 160
<211> 93
<212> DNA
<213> Homo sapiens

<400> 160
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aaatacctgc agaccatcaa gcagaagcgt tac 93

<210> 161
<211> 93
<212> DNA
<213> Homo sapiens

<400> 161
cactccgacg ctgttttcac cgaccagtac acgcgtctgc gtaaacagat ggctgcaaag 60

aaatacctgc agaccatcaa gcagaagcgt tac 93

<210> 162
<211> 93
<212> DNA
<213> Homo sapiens

<400> 162
cactccgacg ctgttttcac cgaccagtac acgcgtctgc gtaaacagat ggctgcacac 60

aaatacctgc agtccatcaa gcagaagcgt tac 93

<210> 163
<211> 93
<212> DNA
<213> Homo sapiens

<400> 163
cactccgacg ctgttttcac cgaccagtac acgcgtctgc gtaaacagat ggctgcaaag 60

cactacctgc agtccatcaa gcagaagcgt tac 93

<210> 164
<211> 90
<212> DNA
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